

REMARKS

Claims 1, 18, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37-38, 41, 42, 46-47 and 69 are currently pending in the subject application and are presently under consideration. A version of all pending claims is presented at pages 2-7 of this Reply. Favorable reconsideration of the subject patent application is respectfully requested in view of the comments herein.

I. Rejection of Claims 1, 18, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37-38, 41, 42, 46-47 and 69 Under 35 U.S.C. §103(a)

Claims 1, 18, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37-38, 41, 42, 46-47 and 69 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Delaney *et al.* (US 2002/0156879) in view of Haeri *et al.* (US 2003/0033421) in further view of McFadden (US 6,671,695). Withdrawal of this rejection is requested for at least the following reasons. Delaney *et al.*, Haeri *et al.* and McFadden, individually and/or in combination, do not teach or suggest all features recited in the subject claims.

To reject claims in an application under §103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) ***must teach or suggest all the claim limitations***. See MPEP §706.02(j). The ***teaching or suggestion to make the claimed combination*** and the reasonable expectation of success ***must be found in the prior art and not based on the Applicant's disclosure***. See *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (emphasis added).

As people move in and out of groups, and as people's contexts change, policies concerning how such people communicate can change. Associations between people are constantly changing, for instance, membership in a group can change, relationships between members in the group can change, and responsibilities of members can change.

Additionally, communication channels available to a member of a group, for the group as a whole and/or for a subset of the group may change based on the changes in association between the members of the group. Typically, desired communication paths, desired communication channels and/or desired points of contact with the group can be maintained manually *via* printed phone chains, printed organizational charts, *etc.* and can quickly become obsolete, with the result that sub-optimal communications within and with the group can be expected.

Applicants' claimed subject matter relates generally to managing communication groups and more particularly to creating and managing distinctions about people, their context and communication policies related to such people and contexts, to facilitate dynamically assigning people to communication categories and managing such categories to facilitate maximizing utility of communications based on category membership of the contactor, the current and/or anticipated context (situation) of the contactee, and communication channel(s) available to the communicating parties.

In one aspect, the claimed subject matter provides systems and methods for dynamically assigning entities (*e.g.*, people, processes, computer components) to communication categories and for dynamically managing categories to facilitate maximizing utility of communications based on membership in such communication categories, *e.g.*, creating and managing distinctions about people, their context and their tasks, wherein context can be abstracted by examining, for example, a communication sender, the relationship of the sender to a user, the time of day at which the sender is attempting to communicate, the task(s) with which the user and/or sender are engaged, the age of project(s) to which the user and/or sender are engaged, the sender and/or user location and so on. Thus, multiple attributes concerning people, including their preferences, contexts, tasks and priorities are analyzed to facilitate building and managing collections of people and to further facilitate establishing and adapting communication policies for people in the collections.

In a further aspect, the subject matter as claimed provides a communication group manager that facilitates specifying, in terms of different groups of people, policies and preferences employed in ideal communication routing and scheduling. The communication group manager also facilitates determining, in terms of different groups

of people, how automated analysis of such ideal communication routing and scheduling can be performed. Such groups of people can be defined by a user, automatically assembled based on descriptions of relationships between people, and/or automatically assembled based on a person having one or more properties that satisfy group inclusion criteria (e.g., age, location, concerned about specific subject matter). The communication group manager facilitates improving communication utility by maximizing the expected utility of a communication through actions including, but not limited to, selecting a communication channel, displaying a list of communication channels, displaying a list of communication channels sorted, for example, by the preferences of the communicating parties and/or rescheduling communications to different channels and/or times than originally selected by the communicating parties. The grouping of people into communication categories simplifies employing abstractions employed in assessing utilities of outcomes and the computation of ideal communication actions. To this end, independent claims 1 and 69 recite similar aspects, namely: *an identifier that identifies one or more communication channels that facilitate maximizing the utility of the communication, the utility of the communication based on a cost and a benefit of the communication to a contactor and a contactee, the cost and the benefit of the communication is related to one or more preferences of the contactor and the contactee*. Delaney *et al.*, Haeri *et al.*, and McFadden, alone or in combination, do not teach or suggest these aspects of the claimed subject matter.

Delaney *et al.* pertains to technology for modifying group membership, including self subscription or self unsubscription. A policy, associated with a group, controls user subscription to and unsubscription from a group. The policy can include at least four policies for subscribing/unsubscribing: open, open with filter, control through workflow and closed. An open policy allows unrestricted subscription or unsubscription; open with filter requires users to satisfy a rule to subscribe, but does not require the rule to be satisfied to unsubscribe; control through workflow requires users to subscribe or unsubscribe through a workflow process; and a close policy prohibits subscription to or unsubscription from the group. The Examiner contends the cited document discloses the salient features of the subject claims in Figs. 26 and 52, and paragraphs 107-108, 112-114, and 403. (See Final Office Action dated September 29, 2006, page 4). Applicants'

representative respectfully disagrees.

Figs. 26 and 52 respectively provide a process for viewing all groups of an entity and a depiction of an identity server coupled to an authority that issues certificates. The commentary associated with Fig. 26 narrates a process that determines all groups to which a user is a member, including static memberships, dynamic memberships and nested memberships. Further, the commentary associated with Fig. 52 describes additional system modules that can be employed to support certificate management through a workflow process. These figures however are silent with regard to maximizing utility of communication wherein the utility of communication is based on a cost and a benefit of the communication to a contactor and a contactee such that the cost and the benefit of communication is related to one or more preferences of the contactor and the contactee.

Moreover, paragraphs 107-108, 112-114, and 403 are similarly silent with regard to the pertinent features of the subject matter as claimed. Paragraphs 107-108 and 112-114 provide commentary related to Fig. 1, wherein an identity system that manages identity profiles (a set of information associated with an entity, such as, a user group or organization) is described. Additionally, paragraph 403 discloses that dynamic certificate related information can be other than certificate status, such as certificate policies and certificate costs. However, contrary to the Examiner assertion, these passages are silent with respect to maximizing utility of communication based on a cost and a benefit of the communication to a contactor and a contactee such that the cost and the benefit of the communication is related to one or more preferences of the contactor and the contactee. Nowhere in the primary document is disclosure made of these pertinent aspects as recited in the subject claims.

In addition, the Examiner acknowledges that Delaney *et al.* fails to teach or suggest *an identifier that identifies one or more communication channels that facilitate maximizing the utility of communication*, and that *membership of the group of communicating parties based at least in part on a reciprocated communication history between entities that comprise the group*. (See Final Office Action dated September 29, 2006, page 4). In order to rectify the aforementioned deficiencies of Delaney *et al.* the Examiner offers Haeri *et al.* and McFadden. Haeri *et al.* relates generally to computer

network protocols and equipment for adjusting packet-by-packet bandwidth according to the source and/or destination port numbers carried within each such packet. More specifically, Haeri *et al.* relates to software program methods for reducing delays in real-time lookup and avoids needing expensive content-addressable memory (CAM). McFadden generally relates to the generation and management of groups of individuals within a data processing environment, *e.g.*, for use in applications such as electronic messaging, content management, security access control and software distribution. However, like the primary document, the secondary and tertiary documents do not teach or suggest basing the utility of communications on a cost and benefit analysis of the communications from the perspective of a contactor and a contactee, such that the perspective of the contactor and the contactee is essentially based on one or more of the preferences of the contactor and the contactee.

With regard to the Response to Arguments section wherein the Examiner posits that the use of digital certificates can be interpreted as costs and group management yields a wide range of e-business needs that can be interpreted as benefits. (*See* Final Office Action dated September 29, 2006, page 9). Applicants' representative respectfully disagrees. Digital certificates or the use of digital certificates, as would be appreciated by those ordinarily skilled in the art, relate to certificates that employ digital signatures to associate a public key with an identity (*e.g.*, the name of a person or an organization, their address, etc.), such that the certificate can be used to verify that a public key belongs to a particular individual or entity. It is submitted that the use of digital certificates would not be interpreted by those of ordinary skill in the art as relating to the costs of communication.

Additionally, group management, as provided in Delaney *et al.*, yields: easy creation, maintenance, and deletion of permanent and ad hoc groups of users; modification and adaptation of groups and their access privileges with minimal disruption to the directory server's underlying schema; efficient addition and deletion of users from established groups; and delegation of administrative responsibility for group membership and subscription requests and approvals. (*See* paragraph 112). While these e-business needs may be perceived by the Examiner as benefits, it will be noted that none of these so-called benefits have any relation whatsoever to the benefit of communication between

the contactor and the contactee. Thus one of ordinary skill in the art on reading the passages indicated by the Examiner would neither perceive nor comprehend them as relating to benefits in relation to the communication between the contactor and the contactee.

Accordingly, in view of the foregoing, and more particularly in view of the failure of the primary, secondary and tertiary documents to teach or suggest the salient features recited in independent claims 1 and 69, withdrawal of this rejection with respect to the subject independent claims (and associated dependent claims) is requested.

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP954US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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